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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,519	11/27/2001	Jong Tak Kim	P-0283	8132
34610	7590	09/28/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,519

Applicant(s)

KIM, JONG TAK

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12 and 14-25 is/are rejected.
- 7) ☒ Claim(s) 5 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-4, 6-12, 14-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,928,482 B1 to *Ben Nun et al.* ("*Ben Nun*") in view of "Overview and Capacity of the GPRS (General Packet Radio Service) to *Ferrer et al.* ("*Ferrer*").

As such to **claim 1**, *Ben Nun* discloses receiving a packet at a central control unit 205, see e.g., figure 2. The central control unit compares loads supported by a plurality of packet processors, see e.g., column 13, lines 15-40 and also column 13, lines 40-60 with respect to the processing of a flow (i.e., call) and the processing of a particular type of flow (i.e., note that load balancing is also performed within a flow). The plurality of packet processors are shown e.g., as packet processors 1-N in figure 2. Assigning the packet to a first packet processor having a first load that is no larger than a second load supported by any other of the plurality of packet processors is taught e.g., at column 12, lines 16-37 and in particular at column 13, lines 15-40 since the processor with the smallest load is selected.

Ben Nun may be silent or deficient to the further limitation of a call connection.

In particular, *Ben Nun* teaches load balancing for a packet network.

Ferrer teaches the further recited limitation above in combination at e.g., the right-hand column on page 106 since *Ferrer* teaches that WLL uses packets (i.e., a call connection).

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Ben Nun* by clarifying that the call connections are packet flows since the packets are routed by address.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to transport packets over a wireless network. In particular, *Ben Nun* cures the above-cited deficiency by providing a motivation found at e.g., the right-hand column on page 106 since packets are transported in a GSM network and a GSM network is a candidate for WLL. Thus the references teach the above claim limitation(s).

As to **claim 2**, with respect to hold time, see e.g., column 15, line 46 – column 16, line 49 where the load time is determined over a time period which is accumulated for each processor. Since the least loaded processor is selected, the load times are further compared.

As to **claim 3**, a call assignment processor is the central control unit 205. The load values are further transmitted over a load information bus to the classifier which is a part of call control unit 205, see e.g., figure 2. The regular interval is the period of time that the load information is obtained, see e.g., column 16, lines 1-49.

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As to **claim 4**, see e.g., column 15, line 46 – column 16, line 49 where the idle transmission time is transmitted to the central control unit for a predetermined time period. Thus implicitly taught from the above statement is a time difference since if during that time period the processor is not idle then the processor is by definition busy.

As to **claim 6**, the load time is based on a rate, see e.g., column 6, lines 1-49.

As to **claim 7**, packets are transmitted over a bearer channel where a bearer channel contains data.

As to **claim 8**, the call connections are assigned sequentially when the loads are equal, see e.g., column 13, lines 40-60.

As to **claim 9**, see the combined rejections for claims 1 and claim 6.

As to **claim 10**, see similar rejection to claim 3.

As to **claim 11**, see similar rejection to claim 4.

As to **claim 12**, see similar rejection to claim 6.

As to **claim 14**, see similar rejection to claim 7.

As to **claim 15**, see similar rejection to claim 8.

As to **claims 16-18**, see similar rejection to claim 1.

As to **claim 19**, see similar rejection to claim 6.

As to **claim 20**, see similar rejection to claim 1. Note that the terminals are the source nodes as taught by *Ben Nun*.

As to **claims 21-23**, see similar rejection to claim 1.

As to **claim 24**, see similar rejection to claim 6.

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As to **claim 25**, see similar rejection to claim 1. Note that the terminals are the source nodes as taught by *Ben Nun* and that WLL, used in combination, is a wireless connection. Also the motivation is the same as mentioned in claim 1.

Allowable Subject Matter

3. **Claims 5 and 13** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123.

The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
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Application/Control Number: 09/993,519

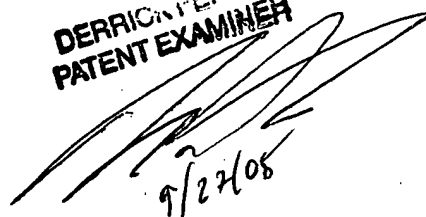
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DWF



**DERRICK FERRIS
PATENT EXAMINER**



9/22/08